REMARKS

35 U.S.C § 103

The examiner rejected claims 1-10, 13-21, and 24-26 under 35 U.S.C. 103(a), as being unpatentable over Abbasi, US 6,786,863, in view of Yee, US 6,016,385, and in further view of Biocca et al., US 2002/0080094, and in further view of Saylor et al., US 7,466,827.

The examiner stated on page 7 of the Office Action:

> **Both Abbasi and Yee describe communicating sounds to the user that are received at a remote location, but neither expressly describes sending sounds in connection with a theme of a morphed image. However, Saylor teaches simulating audio communications over a computer network wherein the sounds are in connection with a theme of a virtual reality simulation system being displayed to a user (column 3, lines 39-47).**

Claim 1 now calls for "an adapter … to send stored virtual sounds in connection with a theme of the morphed, first video image signal…"

Saylor neither describes nor suggests this feature. Rather than sending stored virtual sounds, Saylor is understood to process radio communications used in a flight simulation system to introduce impairment effects for aural realism. Saylor does not disclose stored virtual sounds.

Saylor, col. 1 lines 53 – 67 is reproduced below:

> **An example of aural realism provided by the invention is the replication of the sound of a UHF channel used in a flight simulation system. In this example, system 100 is used to accurately simulate voices that are received by a pilot over a UHF radio channel.**
>
> **As explained below, in one embodiment of the invention, the system is a client-server-client system. Any client can be a source and/or a destination. The server routes audio between the clients and introduces impairment effects as prescribed by simulation models and parameters. A source client is used to receive audio communications. The audio input is sampled and delivered to the server where it is filtered and injected with random noise and other effects, using digital signal processing (DSP) models. The impaired voice data is then delivered to a destination client.**

Saylor, col. 3 lines 38 – 47, cited by the examiner, is reproduced below:

> **In general, the transceiver and impairment models of engine 21 are created by analyzing a real world communications system and its effects on transmitted signals. Their processing is used to model characteristics of real world radio communications channels. The processing is then used to impose those characteristics on a signal, so that the signal simulates a signal**

that was transmitted through those channels. Thus, the model is used to replicate the sound at the output end of a radio communications channel. Transceiver models model the type of radio or other transceiver.

Thus, Saylor imposes real world communications characteristics on transmitted signals through the use of processing. Neither in this paragraph nor anywhere else does Saylor disclose sending stored virtual sounds, because Saylor is only directed to modifying transmitted signals such as radio communication in the context of a flight simulation and are clearly not "... **simulating audio communications over a computer network wherein the sounds are in connection with a theme of a virtual reality simulation system being displayed to a user (column 3, lines 39-47)**", as the examiner contends. Moreover, the examiner has not shown why one of ordinary skill would have thought to make the modification to the alleged combination of Abbasi, Yee and Biocca to include virtual sounds, as claimed, which is, as explained above, not taught by Saylor.

The examiner readily acknowledged that neither Abbasi nor Yee describes sending sounds in connection with a theme of a morphed image. Therefore, neither Abbasi nor Yee would render obvious sending stored virtual sounds in connection with a theme of a morphed, first video image signal, as required by amended independent claim 1. It is not sufficient for the examiner to show that aspects of these claim elements exist in isolation in various references, which, at most, is all that the examiner has been able to arguably show.

Biocca does not remedy the foregoing deficiencies of Abbasi or Yee at least because Biocca also does not disclose or suggest sending stored virtual sounds in connection with a theme of a morphed, first video image signal. In contrast, Biocca merely describes a teleportal system that allows a user to experience a 3D virtual environment via a projective augmented-reality headset.[1] However, the reference is silent in regards to sending sounds in connection with a theme of a morphed, first video image signal.

Therefore, claim 1 is allowable over purported combination of Abbasi, Yee, Biocca, and Saylor.

Claim 15, as amended, recites similar features of claim 1 and is allowable for analogous reasons discussed in claim 1.

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[1] See Biocca at paragraphs [0010]-[0012].

Claims 2 and 16

Claim 2 further limits claim 1 and as amended now requires that the processor overlays a virtual environment including a replacement background over one or more portions of the video image to form a virtual scene. Support for this subject matter can be found, for example, in the originally-filed application at page 7, line 30 – page 8, line 6:

> Using conventional video image editing techniques, the communication gateway 16a processes the signals received from Location B and removes or blanks-out the video image except for the portion that has the user 22b. For the blanked out areas on the image, the communication gateway 16a overlays a replacement background, e.g., virtual environment to have the user 22b appear to user 22a in a different environment.

The examiner stated on page 6 of the Office Action:

> **However, Biocca teaches a teleportal system to provide remote communication to a plurality of users ... wherein the processor overlays a virtual environment over one or more portions of the video image to form a virtual scene (figures 13 and 14, [0012], [0044], [0045], [0049], [0050]).**

The examiner relies on Biocca at figures 13 and 14, [0012], [0044], [0045], [0049], and [0050] for its alleged disclosure of the features set forth in claim 2. Applicant contends that none of the discussions pointed out by the examiner is relevant to the features of the amended claims. For example, the discussion in paragraph [0045] merely describes a teleportal headset using digital video cameras to capture images of a user's face; while paragraph [0050] discloses a preferred embodiment of the projective augmented-reality headset with a pair of LCD displays. Nothing in the reference describes or suggests that a processor overlays a virtual environment including a replacement background over one or more portions of the video image to form a virtual scene.

Therefore, dependent claim 2 is allowable over purported combination of Abbasi, Yee and Biocca.

Claim 16 recites similar features of claim 2 and is allowable for analogous reasons discussed in claim 2.

It is believed that all the rejections and/or objections raised by the examiner have been addressed.

In view of the foregoing remarks, applicant respectfully submits that the application is in condition for allowance and such action is respectfully requested at the examiner's earliest convenience.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

No fee is due. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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